

## ABSTRACT

An alarm generation tool that operates within a Voice over IP (VoIP) network environment to generate alarms  
5 based on ISDN disconnect cause codes. The tool examines call-specific usage records associated with VoIP traffic to detect ISDN disconnect cause codes and determines failure rate information from failure-type disconnect cause codes among the ISDN disconnect cause codes on a per-gateway basis. The tool  
10 generates alarms when the failure rate information, such as failure rates and/or counts, exceeds defined thresholds.

20261844.doc